



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,396	10/07/2005	Koji Akiyama	MAT-8725US	4763
23122	7590	03/17/2008		
RATNERPRESTIA			EXAMINER	
P O BOX 980			HANLEY, BRITT D	
VALLEY FORGE, PA 19482-0980				
			ART UNIT	PAPER NUMBER
			2889	
			MAIL DATE	DELIVERY MODE
			03/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,396

Applicant(s)

AKIYAMA ET AL.

Examiner

BRITT HANLEY

Art Unit

2889

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
- Paper No(s)/Mail Date 10/07/2005
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

[01] Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

[02] The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Please include something regarding fans.

[03]

Claim Rejections - 35 USC § 102

[04] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

[05] Claims 1 and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Koichi (JP 2004-127805).

[06] Regarding claim 1, Koichi discloses an aging method for performing an aging of a plasma display panel using an aging device including an air blowing means (fan, 2, Figure 3) for cooling a plasma display panel ([0022]), the method comprising: cooling the plasma display panel during the aging ([0019]; in Figure 3, fan 2 cools PDP 20 while the PDP is under going aging) while changing at least one of a direction or amount of air blown from the air blowing means ([0022] discloses that fan 2 moves in a direction of the rack 6 and repeats during PDP aging process; also see [0008]).

[07] Regarding claim 6, Koichi discloses an aging device of a plasma display panel, comprising: an air blowing means (fan, 2, Figure 3) for cooling a plasma display panel ([0022]) and an aging power source ([0008] discloses an aging tray that energizes each electrode of the PDP via a clamping circuit) for applying a predetermined voltage to the plasma display panel to cause an aging electric discharge ([0008] discloses a clamping circuit to energize the electrodes), wherein the air blowing means is a means for changing, during an aging, at least one of an air blowing direction or an air blowing amount while cooling the plasma display panel ([0022] discloses that fan 2 moves in a direction of the rack 6 and repeats during PDP aging process; also see [0008]).

Claim Rejections - 35 USC § 103

[08] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[09] The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

[10] Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koichi (JP 2004-127805).

[11] Regarding claim 4, Koichi discloses the aging method of a plasma display panel according to claim 1, and further that at least one of the air blowing devices is moved ([0022] discloses that fan 2 moves in a direction of the rack 6 and repeats during PDP aging process; also see [0008]). Koichi does not appear to explicitly disclose the air blowing means includes a plurality of air blowing devices.

[12] However, at the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the reference of Koichi to include more than one fan in order to better cool the PDP so as to reduce the formation of cracks in the panel.

[13] Regarding claim 9, Koichi discloses the aging method of a plasma display panel according to claim 6, and further that the air blowing means is a means for moving, during an aging, at least one of the plurality of air blowing devices ([0022] discloses that fan 2 moves in a direction of the rack 6 and repeats during PDP aging process; also see [0008]). Koichi does not appear to explicitly disclose the air blowing means includes a plurality of air blowing devices.

[14] However, at the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the reference of Koichi to include more than one fan in order to better cool the PDP so as to reduce the formation of cracks in the panel.

[15] Claims 2, 3, 5, 7, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koichi (JP 2004-127805) in view of Park *et al.* (US 5,775,124).

[16] Regarding claim 2, Koichi discloses the aging method of a plasma display panel according to claim 1. Koichi does not explicitly appear to disclose the air blowing means includes a plurality of air blowing devices, and an air blowing amount of at least one of the plurality of air blowing devices is changed.

[17] However, in the same field of fan cooling, Park *et al.* disclose a plurality of air blowing devices (114, 130, Figure 4), and an air blowing amount of at least one of the plurality of air blowing devices is changed (column 3, lines 63-66).

[18] At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Koichi and Park *et al.* to modify the aging system of Koichi to include the fans and control systems of Park *et al.* in order to reduce the formation of cracks in the panel of the PDP during an aging process.

[19] Regarding claim 3, Koichi discloses the aging method of a plasma display panel according to claim 1. Koichi does not explicitly appear to disclose the air blowing means includes a plurality of air blowing devices and an air blowing direction changeable means provided between the plurality of air blowing devices and a plasma display panel so that, during an aging, the air blowing direction changeable means changes directions of air blown from the plurality of air blowing devices.

[20] However, in the same field of fan cooling, Park *et al.* disclose an air blowing means includes a plurality of air blowing devices (114, 130, Figure 4) and an air blowing direction changeable means (116a, 123a, Figure 4) so that, during an aging, the air blowing direction changeable means changes directions of air blown from the plurality of air blowing devices (column 7, lines 0-12 and lines 25-38).

[21] At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Koichi and Park *et al.* to modify the aging system of Koichi to include the fans, guides, and control systems of Park *et al.* in order to reduce the formation of cracks in the panel of the PDP during an aging process.

[22] Regarding claim 5, Koichi discloses the aging method of a plasma display panel according to claim 1. Koichi does not explicitly appear to disclose the air blowing means

includes a plurality of air blowing devices so that (the combination of fans 114 and 130 and air ports 116a and 123a), during an aging, at least one of the plurality of air blowing devices changes in a direction (column 7, lines 0-12 and lines 25-38).

[23] However, in the same field of fan cooling, Park *et al.* disclose an air blowing means includes a plurality of air blowing devices (114, 130, Figure 4) and an air blowing direction changeable means (116a, 123a, Figure 4) so that, during an aging, the air blowing direction changeable means changes directions of air blown from the plurality of air blowing devices (column 7, lines 0-12 and lines 25-38).

[24] At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Koichi and Park *et al.* to modify the aging system of Koichi to include the fans, guides, and control systems of Park *et al.* in order to reduce the formation of cracks in the panel of the PDP during an aging process.

[25] Regarding claim 7, Koichi discloses the aging device of a plasma display panel according to claim 6. Koichi does not explicitly appear to disclose the air blowing means includes a plurality of air blowing devices, and the air blowing means is a means for changing, during an aging, the air blowing amount of at least one of the plurality of air blowing devices.

[26] However, in the same field of fan cooling, Park *et al.* disclose a plurality of air blowing devices (114, 130, Figure 4), and the air blowing means is a means for changing the air blowing amount of at least one of the plurality of air blowing devices (column 3, lines 63-66).

[27] At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Koichi and Park *et al.* to modify the aging system of Koichi to include the fans and control systems of Park *et al.* in order to reduce the formation of cracks in the panel of the PDP during an aging process.

[28] Regarding claim 8, Koichi discloses the aging device of a plasma display panel according to claim 6. Koichi does not explicitly appear to disclose the air blowing means includes a plurality of air blowing devices and an air blowing direction changeable means provided between the plurality of air blowing devices and a plasma display panel, and the air blowing means is a means for using, during an aging, the air blowing direction changeable means to change the direction of air blown from the plurality of air blowing devices.

[29] However, in the same field of fan cooling, Park *et al.* disclose an air blowing means includes a plurality of air blowing devices (114, 130, Figure 4) and an air blowing direction changeable means (116a, 123a, Figure 4) provided between the plurality of air blowing devices and a plasma display panel (as shown in Figure 4), and the air blowing means is a means for using the air blowing direction changeable means to change the direction of air blown from the plurality of air blowing devices (column 7, lines 0-12 and lines 25-38).

[30] Regarding claim 10, Koichi discloses the aging device of a plasma display panel according to claim 6. Koichi does not appear to explicitly disclose the air blowing means includes a plurality of air blowing devices, and the air blowing means is a means for changing, during an aging, the direction of at least one of the plurality of air blowing devices.

[31] However, in the same field of fan cooling, Park *et al.* disclose an air blowing means includes a plurality of air blowing devices (114, 130, Figure 4) and an air blowing direction changeable means (116a, 123a, Figure 4) so that the air blowing direction changeable means changes directions of air blown from the plurality of air blowing devices (column 7, lines 0-12 and lines 25-38).

[32] At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Koichi and Park *et al.* to modify the aging

Art Unit: 2889

system of Koichi to include the fans, guides, and control systems of Park *et al.* in order to reduce the formation of cracks in the panel of the PDP during an aging process.

Conclusion

[33] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Britt Hanley whose telephone number is (571) 270-3042. The examiner can normally be reached on Monday - Thursday, 6:30a-5:00p ET.

[34] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571)272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

[35] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Britt Hanley/
Examiner, Art Unit 2889

/TOAN TON/
Supervisory Patent Examiner, Art Unit 2889